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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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EXAMINER

CASAREGOLA, LOUIS J

ART UNIT PAPER NUMBER

3746

DATE MAILED: 03/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/648,203

Applicant(s)

DINU, CONSTANTIN ALEXANDRU

Examiner

Louis J. Casaregola

Art Unit

3746

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-6 is/are allowed.
- 6) ☒ Claim(s) 8-9 is/are rejected.
- 7) ☒ Claim(s) 7,10-13 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

Objections To Claims

Claims 7 and 11 are objected to under 37 CFR 1.75(a) for the following reasons:

In claim 7, lines 1-2, "said burner section" lacks antecedent basis. If this expression is intended to refer to the "preburner section" recited in parent claim 1, then identical language should be used in claim 7.

In claim 11, the term "in" at the end of line 2 appears to be a typographical or grammatical error and should be deleted.

Claim Rejections - 35 USC 102

Claims 8 and 9 are rejected under 35 USC 102(b) as being anticipated by Beebe '952 (cited on PTO-1449).

The claimed combustor is sufficiently broad to read on prior art combustion apparatus of the type disclosed by Beebe. Attention is called to Beebe's Figure 1; note fuel injector 20, preburner 14, catalyst section 28, liner 16, and further section 24 located intermediate the preburner and catalyst section. Note also that the broadly claimed flow controller reads on section 24. The only claimed structural requirement of this controller is that it has "a plurality of discrete flow-through areas" (claim 8, lines 18-19). As shown in Beebe's Figures 2 and 3, section 24 comprises a series of individual tubes 34, which in fact, define a plurality of discrete flow areas.

Claim 8 additionally describes the preburner as "imparting a swirling flow pattern" with a "center peak flow velocity" (lines 15-16), and the claim further states that the discrete flow areas "radially distribute the flow to disperse the center peak" (lines 19-20). This language merely describes a series of desired results which do not serve to define over structurally identical prior art. There is nothing in the claimed preburner structure that would make this device any more likely than Beebe's preburner to produce a swirling flow with a center peak, and there is likewise nothing in the claimed flow controller's discrete flow areas that would render the claimed controller any more capable than Beebe's section 24 of establishing a uniform radial flow distribution.

With regard to claim 9, it is additionally pointed out that since Beebe's tubes 34 are all shown as being identical, the discrete flow areas defined by these tubes can be presumed inherently capable of providing the same mass flow.


Allowable Subject Matter

Claims 1-6 are allowed. Claims 7 and 10-13 also contain allowable subject matter; these claims will be allowed if claims 7 and 11 are amended to overcome the above objections, and claims 10-13 are rewritten in independent form.

Additional References

Beebe '366 and Stuttaford et al are cited as disclosing further pertinent examples of catalytic combustion systems.

L. J. Casaregola
571-272-4826 (M-F; 7:30-4:00)
703-872-9306 FAX
March 7, 2005


LOUIS J. CASAREGOLA
PRIMARY EXAMINER

If repeated attempts to reach the examiner by telephone are unsuccessful, the art unit supervisor, Cheryl Tyler, can be reached at 571-272-4834.

Information regarding the status of this application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR, and status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).